



**Town of Arlington, Massachusetts**  
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## Conservation Comm Minutes 06-21-2001

### ARLINGTON CONSERVATION COMMISSION MINUTES

JUNE 21, 2001

Mr. Stevens called the meeting to order at 7:30pm in the main auditorium Town Hall. Present were Corinna Beckwith, Nathaniel Stevens, Timothy Sullivan, David White, Geraldine Tremblay and Judith Hodges of the Commission. Nicole Barron and Fred Beaton of Metromedia Fiber Network represented the Bikepath project. Rich Kirby of LEC Consultants, Avo Asdorian, Hassan Iqrsusi and Al Galla represented the house at 339 Mystic. Dave Albrecht of Rizzo Associates and George Khouri of Finard + Co. represented the Mugar parcel project. Ingeborg Hegemann and Warren Baethge of BSC Group were the Commission's consultants for the Mugar project.

#### Other attendees included:

Clarissa Rowe	Brantwood St.
Louise Piazza	335 Mystic St.
Jennifer Griffith	4 Edith St.
Aram Hollman	12 Whittemore St.
Brian Rehrig	23 Academy St.
Stephen Conlon	13 Edith St.
Elsie Fiore	58 Mott St.
Nick Batzell	54 Brantwood Rd.
Carol Hauser	25 Linwood St.
Grace Perez	Mystic River Watershed Assoc., 20 Academy St.
Ann LeRoy	12 Pierce St.
Cathy Garnett	263 Washington St.
David Stoff	88 Fairmont St.
George Laite	25 Lafayette St.
Catherine Hawkes	15A Lanark Rd.
Fred Santino*	4 Littlejohn St.
Denis Dettling Kalthofer*	3 Mott St.

\*written comment received

#### 7:30pm – REGULATIONS

The Commission is amending the recently passed Regulations in order to align with the vote of Town Meeting to not allow Variances from the Bylaw. Ms. Tremblay made a motion to amend the regulations/Ms. Hodges seconded the motion. The vote to approve the motion was unanimous.

#### 7:40pm – VIOLATION OF EROSION CONTROL on Minuteman Bikeway at Geri's Brook by Metromedia

Ms. Barron explained that they had just recently fired their project contractor, Adesta, and had taken on responsibility for oversight of the project more directly. Ms. Barron submitted to the Commission the pre-construction video of the entire project length. The post-construction video should be done in the next two weeks. Photos were also presented of the area of Geri's Brook (formerly known as Noname Brook) that were taken last week.

Ms. Barron agreed to meet with Commission members on the site to decide what restoration work needs to be completed. Mr. White, Ms. Tremblay and Ms. Hodges will attend the site meeting.

7:45pm - 339 MYSTIC ST., NOTICE OF INTENT to demolish and construct a house and new landscaping

Mr. Kirby presented the project to the Commission. The project involves the construction of a large house on the lot. The increase in impervious area of the house lot will be infiltrated into two sets of dry wells. The patio area that occurs within the Buffer Zone to the Mystic Lake will be turned into lawn and landscaping with additional native plants used in the portion below a large retaining wall. The existing vegetated slope within the Buffer Zone will be left alone. The wall will be faced with Versilock, simulated stone. Evergreen plantings will be installed at the base of wall and creeping juniper will be planted on the top of the wall. An existing large mulberry tree will remain.

Ms. Beckwith presented a submittal of the adjacent house lot (335 Mystic) which is listed as a historic property and asked the applicants if they had clearance from the historic commission for 339 Mystic. The two properties share a common sunken oval garden. Mr. Asdorian answered that they would proceed with that clearance next. The Commission would include a standard condition that all other Town permits be secured in order for the Order of Conditions to be valid.

Ms. Tremblay made the request that native plants be used as much as possible in the Buffer Zone.

Mr. Kirby stated that those below the wall and the creeping juniper would be natives. Ms. Tremblay suggested that the final planting plan be brought before the Commission for approval.

Mr. Kirby stated that there were minor revisions to the drainage plans that would be submitted to the Commission soon. Mr. Galla described that there are only emergency overflow pipes from the drywells (4 in each set) that discharge to the yard. The drywells should be inspected once a year for maintenance. The wall itself will only have small weep holes.

Ms. Tremblay made a motion to approve the project as proposed/Mr. Sullivan seconded the motion. The vote to approve the motion was unanimous.

#### 8:00pm – MUGAR PARCEL, ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION

Mr. Stevens opened the new hearing and noted the latest information received by the Commission on this project: letter from Brian Rehrig, 6/18/01, letter from BSC, 2/14/01, letter from Aram Hollman, 1/29/01, two letters from Steve Kaiser, 2/1/01, 1/25/01, Alewife Area floods video from Glenn Koenig, 3/22/01, ANRAD suppl infor, 6/12/01, Notice of Project Change (EOEA #10335) from the Cambridge Combined Sewer separation project, hearing minutes from 9/7/00, 10/19/00, 11/16/00, 1/18/01, 2/1/01 and 2/15/01, letter with toad photos from Gary Gryan, 6/16/01.

Ms. Hegemann explained the procedure followed for delineating the wetlands on the site. Mr. Albrecht proceeded with a presentation of the additional information submitted by Rizzo Associates on the flood plain determination.

Rizzo Associates states in this submittal that the flood plain elevation for the Mugar property is at 8.1 feet NGVD.

Mr. Albrecht outlined descriptions of adjacent projects and compliance with the WPA in providing compensatory flood storage.

"Didn't agree with CKB's characterization of statement that 1996 Army Corps study claiming "the FEMA study is outdated".

"The Rte 2 viaduct didn't happen.

"The interim access road is low.

Mr. Albrecht described discussions with Ron Santosuosso, Engineer, Town of Arlington, regarding the pump station at Magnolia field. "It was built in early 60's, fell into disrepair and the MBTA agreed to upgrade it."

"The work at Magnolia field, Rizzo just got this document. Ms. Beckwith states that 97,000 cubic feet was filled. No proof of that there were any elevation changes. Mr. Santosuosso did not recall that project."

"The Mugar property floods overland from Alewife brook from the Thorndike St. wetland, over the bikepath, over Thorndike field. The majority of flood waters, 80%.

"A box culvert from the Alewife is lowest and floods Margaret Street, bubbles up.

"Tailwater effects were considered in the Arlington Flood Insurance Study.

"Rizzo would be happy to supply all information to FEMA for a letter of Map Revision.

Ms. Beckwith asked a few initial questions:

1. Why are the two flood routes over Route 2 further upstream from Little River not important?

Mr. Baethge answered that some water would come that way, but the elevation of 8.2 is very close to the 8.1 of the lower area so these would equalize. The lower flood route would provide an exit route for the higher water.

2. In the Notice of Project Change from Cambridge, Bill Pisaino, from Montgomery Watson, states that the 100 year elevation of the Little River is 8.3. Is this significant?

Mr. Baethge could not respond to this specific statement since he has not reviewed the NPC document.

3. How would sediment accumulation within the channel of the Alewife add to the flood plain elevation?

Mr. Baethge couldn't state specifically without a new flood study that would analyse all the variables of the watershed. Generally, the change is probably greater that the volume displaced by the sediments and the water spreads out farther at higher elevations.

4. Mr. Pisaino presented tables at a public presentation that showed an addition of a third of a foot for a 10 year storm at Route 2. Would this be important to the 100 year elevation?

Mr. Baethge stated that a flood study would also be needed in order to answer this question.

BSC sent a letter 6/21/01 in response to these questions. Mr. Baethge agrees that there is doubt on the FEMA study, but without a new study the WPA states that the FEMA 8.1 is a reasonable assumption using the Flood Insurance Study. The 8.1 is provided in the table, not scaled off of the curve, as per DEP recommendations.

Mr. Sullivan stated that he has seen reference to a flood study being commissioned by MDC for the Alewife Brook Master Plan. This information is on its way.

Ms. Rowe stated that the "science has not caught up with the reality of the situation in East Arlington". She has calls in to Massachusetts Emergency Management Agency to do this flood study. She, Grace Perez and Ann Paulsen have secured promises from the Environmental Secretary of Environmental Affairs to fund this study. Why does this proposal not include flows from Spy Pond? She thinks that we should wait for a new flood study to be done before approving this project.

Ms. Griffith presented a video of the March 22, 2001 storm event, filmed by Glenn Koenig. Ms. Griffith is convinced that the event did not have a large return period. Route 2 was flooded and had to be pumped so that traffic could get by. Alewife Brook also flooded at the Interim access road. Little River flooded. This event happened right in the middle of the work day. Lake St. was backed up, Mass Ave was too. There is significant economic impact from this flooding. ADL parking lot was flooded. Route 16 was closed on both sides. Boulevard Rd was flooded. Lafayette St. was flooded. Many houses had sump pumps flowing for several days after the event. Thorndike field was flooded. Birch St. properties to the rear were flooded. Edith St. properties were flooded.

Ms. Tremblay asked when will FEMA classify the 3/22/01 storm? Ms. Griffith tried to find information regarding the return periods. She called USGS, ACOE, FEMA, and NWS. They said to call the North East Regional Climate Center in Ithaca, NY. They have been collected 81 years of data from Boston and 43 years at Bedford. TP-40 is still being used, published in 1961. Brian Rehrig's letter speaks to this issue. When the most recent events are incorporated into the data base, the 1996 event is a 50-60 year storm, the 1998 storm is a less than a 20 year storm, the 3/22/01 storm is less than a 10 year storm. The amount of rain needed to produce a 100 year event is 8.5 inches. The USGS monitors the Aberjona flow and produced a 50 year flood. The 3/22/01 produced the higher flood ever on the Aberjona. This may be due to the new exit off Rt. 93, the Woburn Industri-Plex and its additional pavement.

The neighborhood surveys, nearly 90, showed there is a significant amount of flooding. Additional surveying of the neighborhood on the Mass Ave side of the bikepath would produce more evidence.

Ms. Perez reported that Winchester hired CDM to study flooding and they will need 16 different mitigations to alleviate flooding at a cost of 8-13 million dollars. The protection of land for flood storage is a cheaper alternative than retrofitting for problems later.

Mr. Laite commented that the neighborhood is affected by flooding, it is worsening, and seems to be expanding. The residents have experienced worsening flooding since the MBTA station was built. Steve Kaiser has studied flooding since the 30's, that there is an increase in flooding since then. The ADL site flood study is one of the best available. The objective was clear that they wanted to know the truth.

Mr. Stevens asked Rizzo and BSC if they were in receipt of the letters from 1/25/01 and 2/1/01 from Mr. Kaiser. They answered that they had received these.

Mr. Albrecht mentioned that while Mr. Kaiser was thorough he is a traffic engineer. In the 1930's, the Amelia Earhart dam was installed to keep out the tidal flooding. Mr. Albrecht is not aware of a watershed flood study by Mr. Kaiser.

Ms. Fiore has pictures of the surcharges the Magnolia playground. A neighbor's foundation was destroyed at the time. She also has photos of the Mugar property flooding 1983, 1984 at the MBTA garage, Yates pond. Hotel site flooded up to pediatrics office. She is asking that new flooding information be considered.

Mr. Hollman stated that prudence dictates a certain amount of caution. He brought up the Cambridge CSO project and the claim that they could not be certain of elevations due to the tailwater effect (coincident timing of flood peaks from the Mystic and Alewife Brook). The extent of flooding on the ground is dependent on the saturation of the ground as well. The March storm fell on frozen ground with snowmelt. Can the Commission take into account future conditions as well? Redevelopment of the Oaktree, Arthur D. Little campus, Martignetti property, and the Belmont Uplands. What is the effect of all of these projects being completed?

Mr. Hollman why not consider the Genetics Institute property, and why was a viaduct not constructed for Route 2? The flood routes were not determined based on observations. Further up Route 2, water enters the Mugar property. He presented the MWRA map from the NPC document of the flood control berm along the Alewife Brook, downstream of Route 2. Mr. Hollman claimed that long before the 25 year flood of the Alewife is attained on the diagram, the Mugar property is flooded. Even if this is flooded, it is not relevant. There are other flooding sources for the Mugar property.

Mr. Hollman asked for a copy of the submittals. Ms. Beckwith distributed copies of the ANRAD supplemental information to the audience. Additional written comments will be due by July 2 for enough review time.

Mr. Rehrig asked the Commission to consider the FEMA map in light of the contradictory information and to consider requiring a new flood study in order for this project to proceed. The most extensive study that he knows of is from the Cambridge CSO study, says the Little River 100 year flood study of 8.3. But what is this based on? The current data set is that for the 100 year storm, 6.7 inches falls over 24 hours and 1.5 inches is the peak intensity. The most current numbers for the most localized set of data are in Boston 8.64 inches over 24 hours, and a peak of 2.25 inches. This information should be considered in a new flood study before this project is allowed to proceed.

Ms. Mahon commented on the June 11, 2001 letter from Rizzo, and takes issue with the statement that there is no credible evidence to disprove FEMA, the residents survey is evidence.

Mr. Lisco suggested that the photographic evidence submitted by residents is data. The flood elevations from the pictures can be measured in the field and placed on a map. This would be a way to conduct a reality test for a hydrologic model.

Mr. Santino noticed flood getting worse and worse in his house. He used to use only one pump but now he needs two and they pumped for two weeks.

Ms. Griffith asked residents to relate the context of the flooding and they noticed that since the flooding got worse since the MBTA station went in. Some of the earth excavated from the foundation work of the station went onto Thorndike field. The Mugar property and neighborhood is wet! She has a photo of water nearly up to top of Alewife Brook culvert that goes under Route 2. Higher flows would be backed up the Little River.

Mr. Albrecht made statements and rebuttals that Wetlands Protection Act states "the 100 flood elevation ... said boundary so determined shall be presumed accurate. The presumption may be overcome by credible evidence from a registered professional." Basements in the neighborhood are located 1-2 feet below mean seasonal high groundwater. Portions of private properties are located below the 8.1 elevation. Rizzo did substantial research of the MBTA project, as-built plans were required but Rizzo doesn't proof of them, but its a reasonable assumption to say that the project is in compliance. The storm drainage system in Arlington is undersized and filled with debris.

Mr. Albrecht noted that the interim access road is at elevation 5.0 in the corner near the bikepath. The ADL parking lot floods because it is low. They notify the office workers of predicted flooding events and they can get their cars out.

Ms. Griffith notes that the mean seasonal high ground water that is flooding basements is fed by the rain events which are also contributing to the surface flooding.

Mr. Khouri stated that the applicant knows that the site is low and that it floods, he asks that the Commission approve of the 100 year elevation presented by Rizzo.

Due to the late hour, the Commission, with the applicant's consent, proposed to continue the hearing to July 12, 2001 at 8pm in the same location. Written responses are due by July 2. Mr. Sullivan made a motion to continue the hearing/Ms. Hodges seconded the motion. The vote to approve the motion was unanimous.

#### MISCELLANEOUS

A Meadowbrook Park planting thank you letter is being drafted by Ms. Beckwith.  
The Community Preservation Act committee needs a representative from the Commission.

The Commission voted to convene at approximately 11:15pm.

Respectfully submitted,  
Cori Beckwith, Administrator